



MOTOROLA INC.

Communications
Sector

OPTION C66BE-SP

EXPANDED FREQUENCY CAPABILITY

1. ATTACHMENTS

- QKN7873A 4, 8, or 12-Frequency Receiver Interface Cable Kit and
QRN8501A 4-Frequency Receiver Interface Board Schematic Diagram
and Circuit Board Detail
- Parts List

99-SP5250799
99PL-SP5250799

2. DESCRIPTION

Option C66BE-SP provides for expanded frequency capability in Motorola Satellite Receivers by replacing certain kits normally included with the receiver with the following kits. No change in receiver operation is affected by these changes.

ITEM	DESCRIPTION	CHANGE
QKN7873A	Multi-Frequency Cable Kit	Replaces TKN8000A
QRN8501A	4-Freq. Receiver Interface Board	Replaces TRN8538A

The QKN7873A Cable Kit can also provide up to 12-frequency operation if desired. Refer to attached diagram 99-SP5250799 and parts list 99PL-SP5250799 for details.

The QRN8501A also replaces the QRN8363A (1-freq.), the QRN8375A (8-freq.), and the QRN8376A (12-freq.) versions of receiver interface boards. This is accomplished by the addition of one or two QRN4981A Diode Kits as indicated in the Diode Complement Chart shown on attached diagram 99-SP5250799. Refer also to attached parts list 99PL-SP5250799 for further details.

technical writing services

1301 E. Algonquin Road, Schaumburg, IL 60196

17-373250799-1

(SHEET 1 OF 2)

FROM SOLDER SIDE

TO J2 MODULE
INTERCONNECT
BOARD

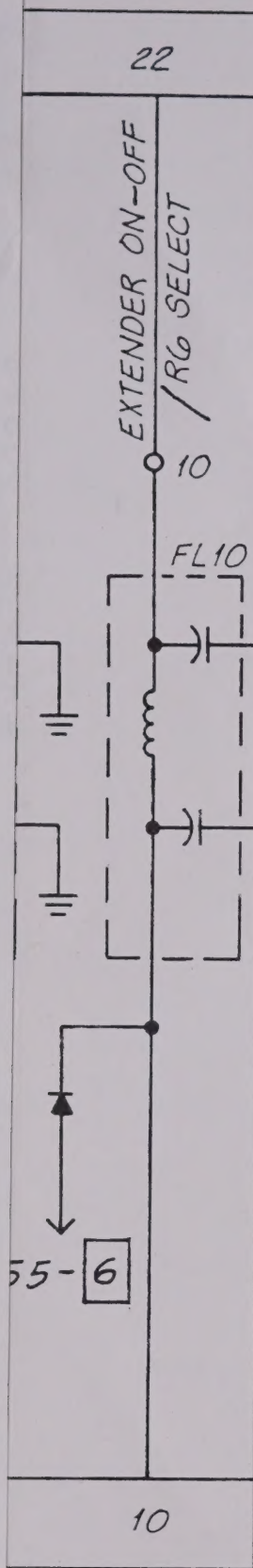
P2

GRY-RED

GND

FL1

TO METERING
ON RF & IF



CABLE COMPLEMENT

MODEL	CABLE KIT USED
QRN8363A (1F)	TKN8000A
QRN8501A (4F)	QKN7873A
QRN8375A (8F)	
QRN8376A (12F)	

E	MOTOROLA PART NO.	DESCRIPTION
		INCLUDES:
	9-84151B05	CONTACT, RECEPTACLE; 17 USED
	14-84556B01	HOUSING, CONNECTION, BLK
	42-10217A02	STRAP TIE, NYLON, WHT; 8 USED

COMPLEMENT

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9	CR10	CR11	CR12
(1F)	IN	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT
(4F)	IN	IN	IN	IN	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT
(8F)	IN	IN	IN	IN	IN	IN	IN	IN	OUT	OUT	OUT	OUT
(12F)	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN

INDICATES ELECTRICAL LOCATION OF SOLDER SIDE
ATING CUT ON MODEL QRN8376A (12F) BOARD ONLY.

APER JU1 USED ON MODEL QRN8376A (12F) BOARD
LY.

TERS FL4, FL5 AND FL7 ARE NOT USED ON MODEL
N8363A (1F); USED ON ALL OTHER MODELS.

N8000A USED ON QRN8363A (1F) ONLY.

QRN8363A 1F Board, QRN8501A 4F Board
QRN8375A 8F Board, QRN8376A 12F Board
QKN7873A 4F, or 8F, or 12F Cable

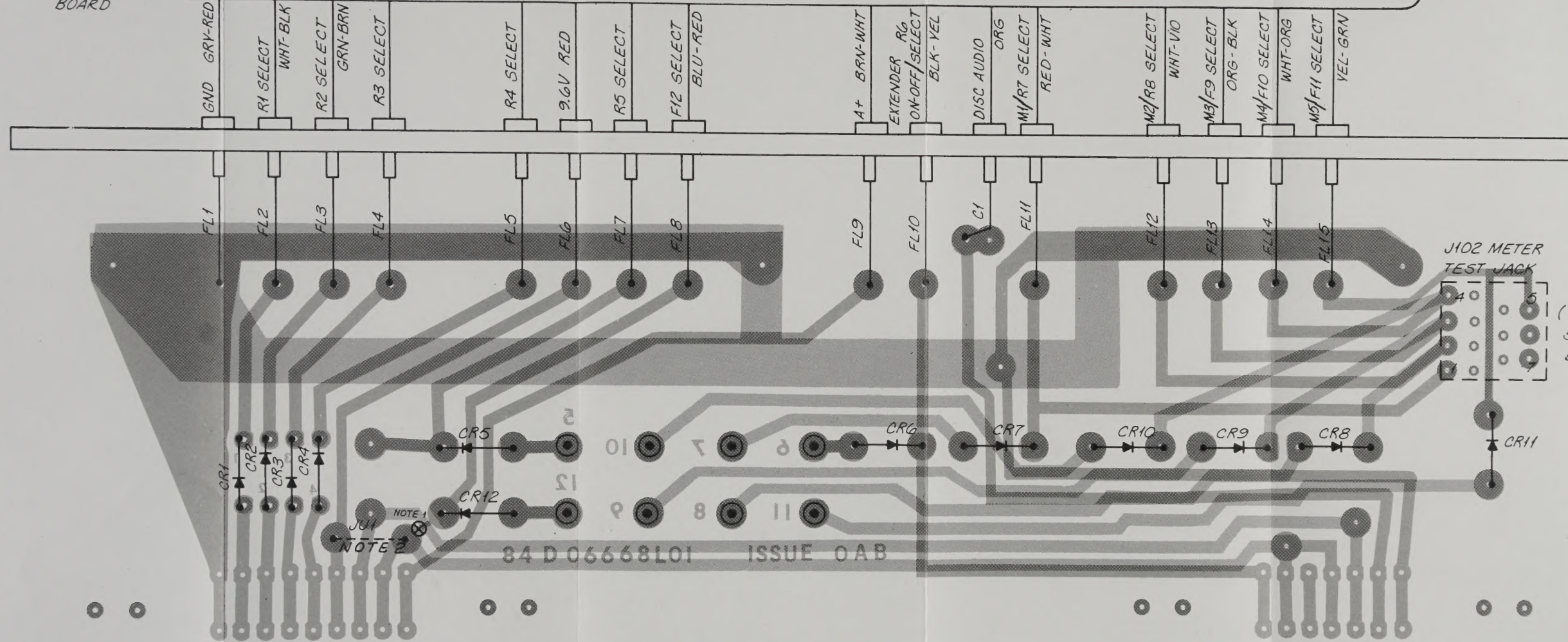
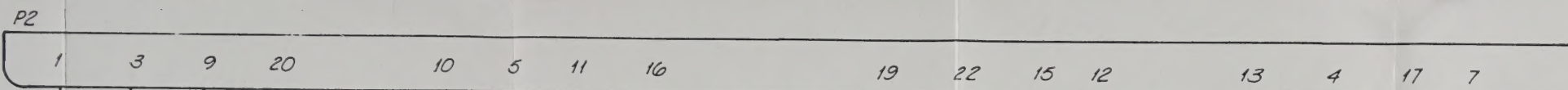
DVP Receiver Interface Schematic Diagram and Circuit Board Detail

Motorola No. 99-SP5250799-1

(Sheet 2 of 2)

7/8/85

TO J2 MODULE
INTERCONNECT
BOARD



(CABLED TO METERING
SOCKET ON RF & IF
BOARD)

NOTES:

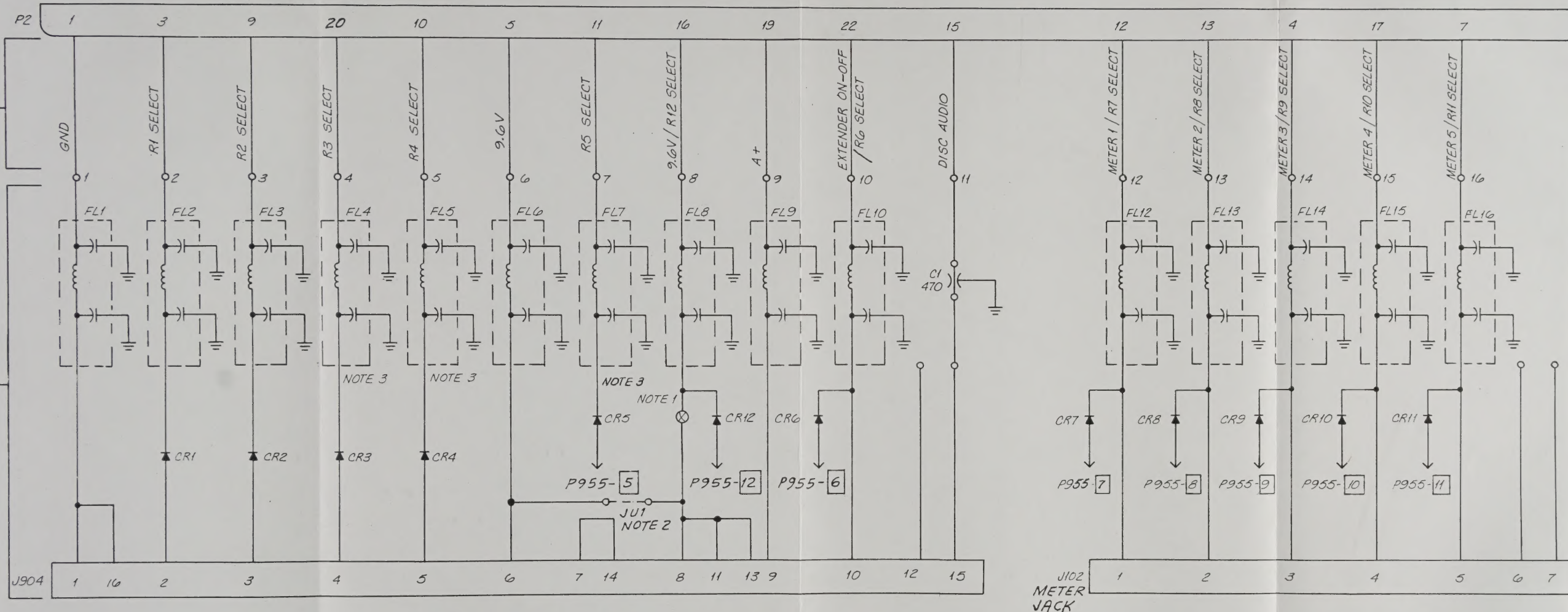
1. INDICATES ELECTRICAL LOCATION OF SOLDER SIDE PLATING CUT ON MODEL QRN8376A (12F) BOARD ONLY.
2. JUMPER JU1 USED ON MODEL QRN8376A (12F) BOARD ONLY.

99-SP5250799-1
(SHEET 1 OF 2)

SHOWN FROM SOLDER SIDE

NOTE 4
TKN8000A OR
QKN7873A
CABLE
KIT

DVP RECEIVER
INTERFACE BOARD



CABLE COMPLEMENT	
MODEL	CABLE KIT USED
QRN8363A (1F)	TKN8000A
QRN8501A (4F)	
QRN8375A (8F)	QKN7873A
QRN8376A (12F)	

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		INCLUDES:
P2	9-84151805	CONTACT, RECEPTACLE; 17 USED
	14-84556601	HOUSING, CONNECTION, BLK
	42-10217A02	STRAP TIE, NYLON, WHT; 8 USED

DIODE COMPLEMENT												
MODEL	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9	CR10	CR11	CR12
QRN8363A (1F)	IN	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT
QRN8501A (4F)	IN	IN	IN	IN	OUT	OUT	OUT	OUT	OUT	OUT	OUT	OUT
QRN8375A (8F)	IN	IN	IN	IN	IN	IN	IN	IN	OUT	OUT	OUT	OUT
QRN8376A (12F)	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN

- NOTES:
1. \otimes INDICATES ELECTRICAL LOCATION OF SOLDER SIDE PLATING CUT ON MODEL QRN8376A (12F) BOARD ONLY.
 2. JUMPER J11 USED ON MODEL QRN8376A (12F) BOARD ONLY.
 3. FILTERS FL4, FL5 AND FL7 ARE NOT USED ON MODEL QRN8363A (1F); USED ON ALL OTHER MODELS.
 4. TKN8000A USED ON QRN8363A (1F) ONLY.

QRN8363A 1F Board, QRN8501A 4F Board
QRN8375A 8F Board, QRN8376A 12F Board
QKN7873A 4F, or 8F, or 12F Cable
DVP Receiver Interface Schematic Diagram and Circuit Board Detail
Motorola No. 99-SP5250799-1
(Sheet 2 of 2)
7/8/85

99-SP5250799-1
(SHEET 2 OF 2)



PARTS LIST

REF SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C1	21-82812H02	QRN8363A (1F), QRN8501A (4F), QRN8375A (8F), QRN8376A (12F) DVP Receiver Interface Board <u>CAPACITOR, feedthru:</u> 470 pF $\pm 20\%$; 500 V
CR1	48-82392B03	<u>DIODE:</u> (SEE NOTE) silicon
CR2, 3, 4	48-82392B03	silicon (not p/o QRN8363A)
CR5	48-82392B03	silicon (QRN8375A, 8376A only)
CR6 thru 8	48-82392B03	silicon (QRN8375A, 8376A only)
CR9 thru 12	48-82392B03	silicon (QRN8376A only)
FL1, 2, 3	91-87511C01	<u>FILTER:</u> rf interference
FL4, 5	91-87511C01	rf interference (not p/o QRN8363A)
FL6	91-87511C01	rf interference
FL7	91-87511C01	rf interference (not p/o QRN8363A)
FL8, 9, 10	91-87511C01	rf interference
FL12 thru 16	91-87511C01	rf interference
J102	9-84207B01	<u>CONNECTOR, receptacle:</u> female, 7-contact
J904	9-83697M01	consists of: female, single contact; 16 used
	7-82194M01	<u>NON-REFERENCED ITEMS:</u> BRACKET, feedthru
	39-10184A10	CONTACT, plug; 8 used
	14-84966D01	INSULATOR, circuit board; 4 used
P2		QKN7873A 4F, or 8F, or 12F Cable Kit <u>CONNECTOR, receptacle:</u> consists of: housing, 20-contact contact, receptacle; 17 used
	30-824278	<u>NON-REFERENCED ITEMS:</u> CONDUCTOR, shielded: ORN; 6-1/2" used
	42-10217A02	STRAP, tie; 16 used
		NOTE: For optimum performance, diodes, transistors, and integrated circuits must be ordered by Motorola part numbers.

QRN8363A (1F), QRN8501A (4F), QRN8375A (8F), QRN8376A (12F)

DVP Receiver Interface Board, and

QKN7873A 4F, or 8F, or 12F Cable Kit Parts List

Motorola No. 99PL-SP5250799-2

8/6/85

